

User Requirements for the Computerized Patient Record: Physician Opinions

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Little has been written regarding physicians' user requirements for the computerized patient record (CPR). We questioned whether physicians uncomfortable with using computers and/or not favoring national adoption of the CPR desired different features than those reasonably comfortable with the CPR.

We mailed a two-page questionnaire to 248 physicians comprising the active membership of the Milwaukee County Medical Society. Sixty urban and suburban physicians (24.2%) responded. We asked them to rank how important each of 21 potential user requirements of a CPR was to them (most important=5 to least important=1). We also asked them to rank on a scale of 1 to 5 whether they favored the adoption of the CPR (FAV), whether they thought using computers was difficult (DIF), and whether they felt comfortable interacting with computers (COMF). We defined a CPR discomfort score (INDEX) = (Reverse of FAV) + DIF + COMF. We then compared ranks of physicians with less discomfort with the CPR (below median INDEX) vs. those of physicians with more discomfort.

Overall, 36 of the 60 physicians favored the adoption of the CPR (strongly agreed or agreed), 18 did not favor adoption (were neutral, disagreed, or strongly disagreed), and seven had no opinion. The top five

most desired user requirements of the 60 physicians were legibility (LEG), a problem list and medications (PROBMED), a lifetime medical record (LIFETIME), easy transmission of information to consultants (CONSULT), and abstractability for research (RES). LEG, PROBMED, LIFETIME, CONSULT, LAB were the most desirable among 32 physicians with median or higher than median discomfort INDEX scores. LEG, PROBMED, RES, access to information from multiple locations (ACCMULT), CONSULT ranked highest among the 28 physicians with lower than median discomfort INDEX scores. Of interest, only the 11 physicians who found computers most difficult to use did not rank PROBMED in their top five most desired features, whereas all others ranked it second most important. Older physicians ranked access to laboratory data (LAB) in their top five most desired requirements, whereas younger physicians ranked ACCMULT, but not LAB, in their top five.

We conclude that legibility and having a problem list and medications almost uniformly rank as the most desirable user requirements of the CPR from physicians, and that level of discomfort with the CPR and/or age only slightly influences which features are most desired CPR requirements.